Methotrexate and Misoprostol Abortions

What side effects may I notice from taking misoprostol?

Side effects that you should report to your prescriber or health care professional as soon as possible:

- **dehydration**
- **severe diarrhea**
- **unusual vaginal bleeding**

Side effects that usually do not require medical attention (report to your prescriber or health care professional if they continue or are bothersome):

- **diarrhea**
- **headache**
- **menstrual irregularity or cramps**
- **nausea**
- **stomach pain or cramps**

Source: http://webmd.lycos.com/content/asset/cp_drug_539

Other side effects

Source: Ellen R. Wiebe, MD
Canadian Medical Association Journal 1996; 154; 165-170

Methotrexate is cytotoxic to trophoblast and hence causes abortion; however, when methotrexate is used alone, abortion takes a mean 24 days after drug administration.[7] Prostaglandin analogues increase the contractility of the smooth muscle in the uterus and cause expulsion of the conceptus.

Used alone, misoprostol results in completed abortion in only 47% of women.[8] However, when methotrexate and misoprostol have been used together, the rate of completed abortion has been 90%. Methotrexate affects bone marrow, liver and kidney function when used for some other indications, but the single dose used in these studies[1,2,6,7] did not have any effect on hematologic, hepatic or renal function.

The amount of bleeding and pain caused by medical abortion is greater than that caused by surgical abortion.

Sources:

1.Stovall TG, Ling FW, Gray LA: Single-dose methotrexate for treatment of ectopic pregnancy. Obstet Gynecol 1991; 77: 754-757
2.Stovall TG, Ling FW: Single-dose methotrexate: an expanded clinical trial. Am J Obstet Gynecol 1993; 168: 1759-1765
6.Creinin MD, Darney PD: Methotrexate and misoprostol for early abortion. Contraception 1993; 48: 339-348
7.Creinin MD: Methotrexate for abortion at < or = 42 days gestation. Contraception 1993; 48: 519-525
8.Creinin MD, Vittinghoff E: Methotrexate and misoprostol vs misoprostol alone for early abortion. A randomized controlled trial. JAMA 1994; 272: 1190-1195

An admission of risks and of the abortifacient qualities of M&M:

Currently we ** restrict this procedure to pregnancies seven weeks or less as determined by transvaginal ultrasound. This relatively early cut-off was based upon published reports which were later confirmed by our own experience indicating that beyond this stage the failure rate is greater than 50%. We feel this level is unacceptably high .

Methotrexate/Misoprostol abortion has one clear advantage over surgical abortion: It simulates the process of spontaneous abortion (miscarriage). Spontaneous abortion, a common event, is the mechanism which the body uses to expel an abnormal or non-developing pregnancy. One disadvantage is that the procedure is not always successful; and eventually a traditional surgical procedure may be advisable. The major disadvantage is the prolonged time framework.

Ten to twenty days for completion of the process is typical. Surveys have shown, however, that a significant percentage of women prefer the concept of a non-surgical procedure.

There are at least two visits required for methotrexate/Misoprostol. The first visit entails a medical history followed by private counseling regarding the specifics of the process. An ultrasound examination is then performed to establish the precise stage of pregnancy. Blood tests are done as a reference point for methotrexate suitability.

If the history and examination indicate the patient to be an appropriate candidate, an injection of Methotrexate determined by height and weight is administered in the buttock. Five to seven days later, the patient is instructed to insert the Misoprostol suppository which she recieved at the first visit.

On the second visit a repeat ultrasound examination is performed to determine if the pregnancy has been expelled, or if not, if it has continued to develop. If the pregnancy has been expelled, no further treatment is required. If it has continued to develop, it is usually too late for Methotrexate to be effective. Suction curettage is recommended in this situation.

If the pregnancy has ceased to develop, but persists, the options are to wait for spontaneous expulsion, repeat the Misoprostol to expel the gestational sac, or perform standard suction curettage. These options are a matter of patient preference.

The mechanism of action of Methotrexate and Misoprostol is of interest. Methotrexate is an old line chemotherapeutic agent which is currently in wide use.

It is generally well tolerated in doses well beyond that used for pregnancy termination and for much greater periods of time. It is felt to act as an abortifacient (inducer of abortion) by damaging chorionic villi, the actively growing root-like structures that attach the early pregnancy to the uterus. The result is the detachment of the early pregnancy within the uterus. Misoprotol is in a class of enzymes know as prostaglandins. Among other actions it causes the uterus to contract vigorously. In this situation, with the pregnancy separated from the wall of the uterus, the result is expulsion of the pregnancy. The process is accompanied by cramping and bleeding usually similar to a spontaneous abortion.

**** Source: BSS International: 7707 North University Drive,**
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Michael Benjamin MD "Florida's most experienced abortion provider"